

Amendments to the Specification:

Please replace paragraph [0032] with the following amended paragraph:

[0032] In order to assemble the two subassemblies 82, 90 and spring ~~52~~ 50 together, the spring is placed in the spring cavity 66 and the second subassembly 90 is inserted into the top of the first subassembly 82 as indicated by arrow 92 with the bottom of the second housing 54 entering into the area 70 between the two columns 68. The area 70 is sized and shaped to slidably received the second housing member 54 therein. As the second housing member 54 is inserted into the area 70, the snap lock latches 88 are resiliently deflected in an inward direction until the latches pass by the transverse sections 74 of the columns 68. The snap lock latches 88 are then able to deflect outward and into the two alignment slots 72. This provides a snap lock connection of the second housing member 54 to the first housing member 52.

Please replace paragraph [0034] with the following amended paragraph:

[0034] As seen best in Figs. ~~[[4]]~~ 5 and 8, the seat sensor device 20 includes electrical terminals ~~92~~ 94. More specifically, in the embodiment shown, three of the terminals 94 are provided at each of the sensor assemblies 26; one terminal for each one of the electrical leads 78 of the Hall effect sensor 46. Referring also to Figs. 12-14, one of the terminals 94 is shown. Each terminal 94 generally comprises a one-piece electrically conductive

member. In a preferred embodiment, the terminal 94 is comprised of flat sheet metal which has been stamped into the shape shown. The terminal ~~24~~ 94 generally comprises a center section 96, bottom extending sections 98, a top extending section 100, and upward extending side sections 102.

Please replace paragraph [0036] with the following amended paragraph:

[0036] The side sections 102 are then deformed inward towards the area 104 to clamp the middle exposed sections of the electrical leads 78 into a mechanical and electrical connection with the top extending section 100 and side sections 102 against the top side of the center section 96. If the electrical leads ~~98~~ 78 comprise electrical insulation, the relatively sharp edges on the top extending section 100 is adapted to cut through the electrical insulation to insurer electrical contact between the terminal 94 and the electrical conductor of the electrical lead 78. However, in alternate embodiments, any suitable type of terminal or method of electrically connecting the electrical leads 78 to the electrical conductors 32 of the FPC mat 22 could be provided. However, in the embodiment shown, the terminals 94 are adapted to allow the side sections 102 to be moved to an open position again to allow the sensor assembly 26 to be removed from connection with the terminals. A replacement sensor assembly can be connected to the FPC mat to replace a broken or faulty original sensor assembly 26. Thus, in a preferred embodiment, the electrical connection of the sensor assembly

26 to the conductors in the FPC mat is preferably a removable connection. In an alternate embodiment, the electrical connection might not comprise a removable connection.

Please replace paragraph [0039] with the following amended paragraph:

[0039] The present invention can use overmolding of a housing member onto the Hall effect sensor to protect the Hall effect sensor from damaged during assembly. With the present invention, the magnet and the Hall effect sensor are held in parallel at all times. The present invention can retain the magnet and the Hall effect sensor in alignment along a common [[Z]] or normal axis 47 because the Hall effect sensor is molded into a base of the magnet-spring tower. The design allows the Hall effect sensor, along with the entire magnet-spring tower, to be changed relatively quickly. The magnet and Hall effect sensor are contained in one subassembly; the sensor assembly 26. Thus, field repair is now possible and practical. The present invention also allows the use of a fewer number of components than the conventional design. The present invention also provides a fewer number of assembly steps.